

Amendments to the Drawings:

The attached replacement sheets of drawings include changes to FIGs. 1-6 correcting various informalities. These sheets, which include FIGs. 1-6, replace the original sheets including FIGs. 1-6.

REMARKS

Claims 1-3, 8, 13,-14, 16 and 21-22 are pending herewith. Claims 4-7 and 9-12 are withdrawn.

1. Examiner Garcia is thanked for courtesies extended during a personal interview on May 19, 2009, the substance of which has been incorporated into the following remarks.
2. The drawings were objected to for informalities. Enclosed herewith are corrected drawing sheets in compliance with Rule 121(d) further identifying unformed annular portions 7. Based on the corrected drawing sheets, withdrawal of the objection to the drawings is respectfully requested.
3. The disclosure was objected to for informalities. The specification has been amended to consistently refer to feature 2 as inwardly facing protrusions, as requested in the last Office Action. Additionally, the noted claim language from claims 1 and 21 has been added to the specification and related to the drawings. See revisions to the first full paragraph on page 18 of the specification as filed.
4. Claims 1 and 21 were objected to for informalities. Applicants submit that the amendments herein to the claims address these objections.
5. Claims 1-3, 8 and 13-16 were rejected under §112, second paragraph. To address this rejection, claim 1 has been amended to recite that the unformed annular portions include an endmost, unformed annular portion to clarify the identity of the endmost portion. Based on the amendments to claim 1, withdrawal of the §112, second paragraph rejection is requested.
6. Claims 1-3, 8, 13, 14, 16, and 21 were rejected under §103 over Cramer et al. This rejection is respectfully traversed for the following reasons.

Independent claims 1 and 21 have been amended herein to clarify particular features associated with the elected species, that shown in FIG. 4. Claim 1 has been amended to clarify that the protrusions have a diameter and the guide portion terminates at a free end (see topmost axial edge or end of the tolerance ring 2, shown in FIG. 4), which defines an opening, that

opening having a diameter that is not greater than the diameter of the protrusions. The foregoing claim amendments are made to clarify that the tolerance ring is intended for deployment completely within the bore of a body, such as bore 4 of actuator arm 5 (see FIG. 4). It is also clarified that the free end of the guide portion defines an axial end of the tolerance ring, as clearly shown in FIG. 4.

Turning to the prior art, as explained during the interview, Cramer et al. disclose a configuration in FIG. 7 having a flared axial end, and inwardly, rather than outwardly facing protrusions 64. As discussed during the interview and pointed out in Applicants' prior responses, it is Applicants' position that based on the state of the art and attendant fabrication techniques, that one of ordinary skill in the art would not have "swapped" the direction of the protrusions, such that the protrusions 64 faced outwardly. This is primarily because conventional fabrication techniques rely upon the protrusions as the sliding surface for final assembly of the inner and outer components, and the embodiment shown in FIG. 7 is engineered for placement of the tolerance ring into the bore first, followed by insertion of shaft 80. Modification of the protrusions so as to face outwardly would thereby require an entirely different fabrication process, which would not have been obvious to one of ordinary skill in the art.

In any event, it is quite clear that the structure shown in FIG. 7 of Cramer et al. does not have a flare as defined in the present claims, namely a guide portion having a free end corresponding to the axial end of the tolerance ring that defines an opening having a diameter not greater than the diameter of the protrusions. Clearly, the flared portion 82 shown in FIG. 7 of Cramer et al. must be larger in diameter, so as to achieve an interference fit between the tolerance ring and the body 76, to prevent the tolerance ring from axially sliding beyond its intended position (to the left according to FIG. 7). Modification of the structure shown in FIG. 7 to have the claimed diameter features would render a tolerance ring inoperable for its intended purpose.

During the interview, Examiner Garcia also pointed to FIG. 9, pointing out that the inclined portion within the axial interior of the tolerance ring can be thought of as a "guide portion." In light of the position taken by the PTO, the claims have been amended herein to

clarify that the guide portion has a free end, corresponding to the axial end of the tolerance ring. Accordingly, any feasible modification of the structure shown in FIG. 9 does not even remotely resemble the claimed tolerance ring.

For at least the forgoing reasons, Applicants respectfully submit that the claimed invention now clearly patentably defines over Cramer et al. Accordingly, reconsideration and withdrawal of the rejection over Cramer et al. are respectfully requested.

7. Claims 1-3, 8, 13-16 and 21 were rejected under §103 over Applicants admitted prior art (FIG. 2) in view of Blaurock et al. This rejection is respectfully traversed for the following reasons.

The PTO has taken a position that Applicants' APA FIG. 2 contains all features of the claimed invention, with the exception of the claimed guide portion. The PTO then looks to Blaurock et al. for disclosure of a "guide portion." Blaurock et al. teach a tolerance ring that is deployed entirely within a recess, either a recess within a machine part having a bore (see machine part 126, FIG. 7), or within a recess within the shaft deployed within the bore (see FIG. 8). It appears that the PTO relies upon the flared ends of the Blaurock et al. ring shown in FIG. 7, and it is argued that those flared ends would have been incorporated into the structure of Applicants admitted prior art FIG. 2. However, Applicants submit that such a modification to APA FIG. 2 would not even have remotely been made based on the disclosure of Blaurock et al. Specifically, Blaurock et al. teaches flared end portions at opposite ends of the ring, solely for interference fit within the terminating portions of the recess as provided in machine part 126. The structure shown in APA FIG. 2 does not have such a recess, and accordingly, absent Applicants' own teaching, the modification would not have been obvious. Turning to FIGs. 9-11 of Blaurock et al., it is clearly taught that the flared or tapered end portions of the disclosed ring are intended for interference fit with the corresponding recess within the machine part 126 or shaft 124 (see column 4 of Blaurock et al.).

Further, Applicants submit that new claim 22 even further defines over the proposed combination, clearly specifying only a single guide portion, the opposite axial end being defined by an unformed annular portion, as shown in FIG. 4 of the present application.

For at least the foregoing reasons, Applicants respectfully submit that the presently claimed invention would not have been obvious over APA FIG. 2 in view of Blaurock et al. Accordingly, reconsideration and withdrawal of the rejection over APA FIG. 2 and Blaurock et al. are respectfully requested.

Applicants respectfully submit that the present application is now in condition for allowance. Accordingly, the Examiner is requested to issue a Notice of Allowance for all pending claims.

Should the Examiner deem that any further action by the Applicants would be desirable for placing this application in even better condition for issue, the Examiner is requested to telephone Applicants' undersigned representative at the number listed below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Applicants do not believe that any additional fees are due, but if the Commissioner believes additional fees are due, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-3797.

Respectfully submitted,

6/12/04
Date



Jeffrey S. Abel, Reg. No. 36,079
Attorney for Applicant(s)
LARSON NEWMAN ABEL POLANSKY &
WHITE, LLP
5914 West Courtyard Drive, Suite 200
Austin, TX 78730
(512) 439-7100 (phone)
(512) 439-7199 (fax)